

REMARKS

Claims 1, 4, 5, 9, 11-14, 17-28, 32, 34, 37-39, 42-45, 48, 49, 53-55, and 57 are pending and Claims 2, 3, 6-8, 10, 15, 16, 29-31, 33, 35, 36, 40, 41, 46, 47, 50-52, 56, 58 and 59 are withdrawn from consideration. An Office Action mailed December 30, 2003 presented an election of a restriction requirement and rejected Claims 1, 13, 14, 18, 19, 23, 24, 38-39, 42, 43, 45, 49, 54, 55, and 57 under 35 U.S.C. § 102 and Claims 4, 5, 9, 11, 12, 17, 20-22, 25-28, 32, 34, 37, 44, 48, and 53 under 35 U.S.C. § 103. By way of this amendment, Applicants confirm the election of the previously presented restriction requirement and amends Claims 13, 23, and 38. Pursuant to 37 CFR § 1.111, Applicants hereby respectfully request reconsideration of the application.

RESTRICTION REQUIREMENT:

Applicants hereby confirm election of the invention of Group 8 that includes Claims 9, 26, 32, 37, 42, 47, and 48 with generic claims being Claims 1, 4, 5, 11-14, 17-25, 27, 28, 34, 38, 39, 43-45, 49, and 53-55.

REJECTION OF CLAIMS 1, 19, 49, 54, 55, AND 57 UNDER 35 U.S.C. § 102

The Office Action rejected Claims 1, 19, 49, 54, 55, and 57 as being anticipated by Bateman et al. The Office Action states that Bateman et al. disclose a ground proximity warning system for use with aircraft having degraded performance comprising the steps of estimating a deceleration required to stop the aircraft on a runway; comparing the deceleration to a maximum deceleration on the aircraft; and asserting an alert signal when the deceleration is greater than the maximum deceleration (col. 9, lines 1-41). Applicants respectfully traverse this rejection.

Applicants submit that the normal deceleration profile disclosed in Bateman et al. is only calculated when the aircraft is airborne (FIGURE 12) and fails to teach or suggest estimating a deceleration required to stop the aircraft on a runway of intended landing. Therefore, Applicants submit that Claim 1 is allowable over the cited reference.

Because independent Claims 19 and 49 are similar to Claim 1, they are allowable for the same reasons that make Claim 1 allowable. Because Claims 54, 55, and 57 depend from allowable independent Claim 49, they are allowable for the same reason that makes Claim 49 allowable.

REJECTION OF CLAIMS 13, 14, 18, 23, 24, 38, 39, 42, 43, AND 45 UNDER 35 U.S.C. § 102

The Office Action rejected Claims 13, 14, 18, 23, 24, 38, 39, 42, 43, and 45 as being anticipated by Crook. The Office Action states that Crook teaches monitoring a plurality of parameters indicative of a runway landing length; assigning of risk of runway overrun value based on the plurality of parameters; and asserting an alert signal when the risk value exceeds a predetermined threshold value. Applicants respectfully traverse this rejection.

With regard to amended independent Claim 13, Applicants submit that Crook teaches altitude and gross weight are input from other aircraft instruments and when combined with aircraft performance criteria . . . computes how quickly that aircraft can be stopped once it is on the runway (col. 3, lines 16-22). Applicants submit that Crook appears to disclose determining time to stop aircraft how quickly. Also, Crook stores aircraft performance criteria in the memory 25 and does not store runway length in the memory 25. Thus, Crook fails to teach or suggest monitoring parameters that include runway length. Therefore, Applicants submit that amended Claim 13 is allowable over the cited reference.

Because amended independent Claims 23 and 38 are similar to amended independent Claim 13, they are allowable for the same reason that makes Claim 13 allowable. Because Claims 14, 18, 24, 39, 42, 43, and 45 dependent from allowable independent claims, they are allowable for the same reason that makes their corresponding independent claims allowable.

REJECTION OF CLAIMS 4, 5, 11, 20-22, 25-28, 34, AND 53 UNDER 35 U.S.C. § 103

The Office Action rejected Claims 4, 5, 11, 20-22, 25-28, 34, and 53 as being unpatentable over Bateman et al. in view of Crook. The Office Action states that Bateman et al.

do not teach the step of commanding an autopilot go-around maneuver. However, Crook teaches a computerized aircraft landing and takeoff system comprising the step of commanding an autopilot go-around when the computer determines that the landing is unsafe. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teaching of Crook in the system of Bateman et al. because they both teach a device that relates to the field of aircraft ground proximity warning system. Applicants respectfully traverse this rejection.

Applicants submit that Crook computes how quickly the aircraft can be stopped once it is on the runway (col. 3, lines 16-22). This is a time determination and thus fails to teach or suggest estimating a deceleration required to stop the aircraft on a runway of intended landing. Therefore, Independent Claims 5, 21, and 25 are allowable. Because Claims 4, 11, 20, 22, 26-28, 34, and 53 depend from allowable independent claims, they are allowable for the same reasons that make their corresponding independent claims allowable.

REJECTION OF CLAIMS 9, 12, 32 AND 37 UNDER 35 U.S.C. § 103

The Office Action rejected Claims 9, 12, 32 and 37 as being unpatentable over Bateman et al. in view of Crook and further in view of Muller et al. The Office Action states that Bateman et al. and Crook do not directly teach the step of monitoring a plurality of parameters that include a step of monitoring a position of the aircraft. However, the use of GPS to indicate the current position and projected flight path of the aircraft is old and well-known in the art as taught by Muller et al and that it would have been obvious to the skill artisan to use the GPS of Muller et al. in the system of the combination so that the position of the aircraft is accurately monitored. Applicants respectfully traverse this rejection.

Applicants submit that Muller et al. fail to overcome the deficiencies of Crook and Bateman et al. Claims 9, 12, 32, and 37 are allowable for depending from allowable independent claims.

REJECTION OF CLAIM 17 UNDER 35 U.S.C. § 103

The Office Action rejected Claim 17 as being unpatentable over Crook in view of Muller et al. The Office Action states that Crook does not teach a caution alert signal when the value exceeds a first threshold amount in a warning signal when the value exceeds the second threshold amount, however, Muller et al. teach a pair of alert envelopes. Therefore, it would have been obvious to the skilled artisan to combine and teachings of Crook and Muller et al. in order to provide an alert signal based on the type of alert that is provided. Applicants respectfully traverse this rejection.

Because Claim 17 depends from allowable Independent Claim 13, it is allowable for the same reason that makes Claim 13 allowable.

REJECTION OF CLAIM 44 UNDER 35 U.S.C. § 103

The Office Action rejected Claim 44 as being unpatentable over Crook in view of Bateman et al. The Office Action states that Crook does not show the alert signal including an oral alert signal. However, using an oral alert signal as an alternate wait to generate the alarm as taught by Bateman et al. Therefore, it would have been obvious to the skilled artisan to employ the teaching of Bateman et al. in the system of Crook in order to provide an audible warning if desired. Applicants respectfully traverse this rejection.

Therefore, because Claim 44 depends from an allowable independent claim, it is allowable for the same reason that makes the corresponding independent claim allowable.

REJECTION OF CLAIM 48 UNDER 35 U.S.C. § 103

The Office Action rejected Claim 48 as being unpatentable over Crook in view of Muller et al. The Office Action states that Crook does not show the parameters to include terrain data. However, Muller, et al disclose the terrain database to provide varying resolutions of terrain data as a function of the typography of the terrain. Therefore, it would have been obvious to one of

ordinary skill in the art to employ the teaching of Muller et al in the system of Crook in order to provide information relating to geographical areas. Applicants respectfully traverse this rejection.

Therefore, because Claim 48 depends from an allowable independent claim, it is allowable for the same reason that makes the corresponding independent claim allowable.

CONCLUSION

Applicants respectfully submit that all of the claims of the pending application are now in condition for allowance over the cited references. Accordingly, Applicants respectfully request withdrawal of the rejections, allowance, and early passage through issuance. If the examiner has any questions, the examiner is invited to contact the Applicant's agent listed below.

Respectfully submitted,

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MAIL CERTIFICATE

I hereby certify that this communication is being deposited with the United States Postal Service via first class mail under 37 C.F.R. § 1.08 on the date indicated below addressed to: MAIL STOP NON-FEE AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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